CANONET G-III 17

Similar models: Canonet QL 17/19

Battery: 1 ea. PX13

Fig. 1 — top cover removed

Fig. 2 — bottom cover removed

Fig. 3 — front cover plates removed

Fig. 4 — front view, lens standard removed

Fig. 5 — back of lens standard

Fig. 6 — shutter separated from lens standard

Fig. 7 — old and new battery-test boards, wiring

Fig. 8 — terminal board, wiring

ADJUSTMENT LOCATIONS:

Rangefinder, horizontal	A
Rangefinder, vertical	B
Meter calibration	C
Meter housing position	D
Rangefinder resistor	E
Diaphragm opening	F
Trapping blade	G
Release overtravel	H
Transport release	I
Focus	J

ADJUSTMENT PROCEDURE:

1. Hold the control end of the meter needle aligned with the f/5.6 scribe line, Fig. 3, and release the shutter at the auto setting. The diaphragm should stop down to f/5.6. To check, watch the diaphragm as you rotate the diaphragm-setting ring to the manual f/stop settings. When the diaphragm just starts to open, the f/stop calibration tells you the actual diaphragm opening. The diaphragm should start to move when you reach the f/5.6 calibration. Adjust with eccentric F, Fig. 3.

2. Hold the control end of the needle aligned with the f/5.6 scribe and note the f/stop indication through the finder. Bend the readout end of the needle to align with f/5.6 in the finder.

3. If you make the adjustment in step #1, check to make sure the trapping blade is not in the path of the meter needle until you push the release. The curved edge of the trapping blade should align with the curve in the slot, Fig. 3. Turn the eccentric — G in Fig. 3 — so that the trapping blade clears the needle. If the camera does not have the eccentric, you may have to bend pin G, Fig. 4.

4. Make sure that the shutter releases after the stepped blade engages the needle to set the aperture. Adjust with eccentric I or by changing the spacer thickness between the shutter-release plate and the connecting lever, Fig. 3. Also adjust the release overtravel (at least 0.4mm additional travel of the release button after the shutter releases) with eccentric I.

5. Adjust the meter accuracy with variable resistor C or by rotating the galvanometer housing after

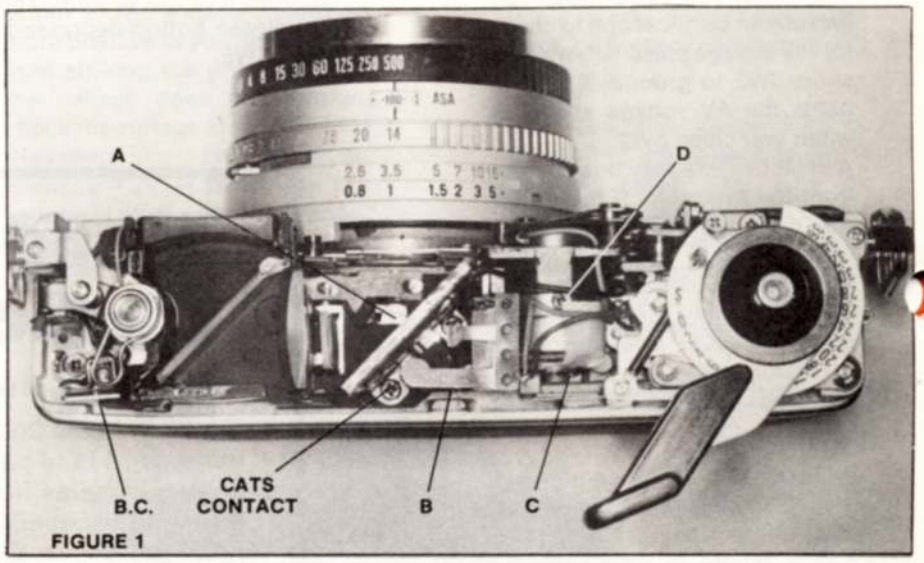

FIGURE 1

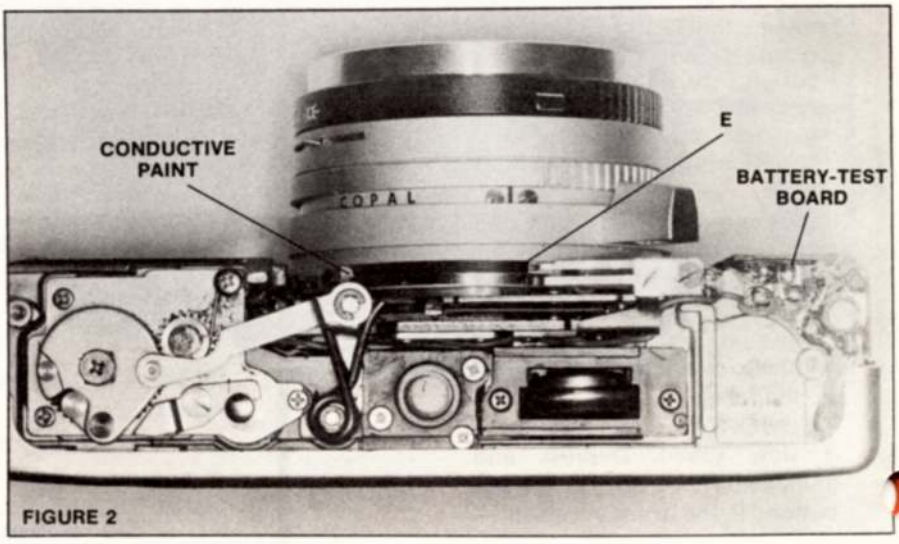

FIGURE 2

loosening the locking screw. If you rotate the housing, check the CATS adjustment (step #6).
Proper needle readings at ASA 100, K-factor 17.5:

EV8	1/30	f/2.8	±1 stop
EV11	1/60	f/5.6	±1 stop
EV14	1/125	f/11	±1 stop

6. CATS adjustment. Set auto, ASA 100, and the 2-meter focus position. Cover the CdS cell and short between ground and the CATS contact, Fig. 1. The needle should indicate between f/5.6 and f/8. If not, rotate the meter housing or shift the position of the rangefinder-resistor band, Fig. 2.

7. Focus adjustment. Loosen the three setscrews on the outer circumference of the focus ring. Also loosen screw J, Fig. 3. Set the focus ring to infinity and slide screw J for the best infinity focus.

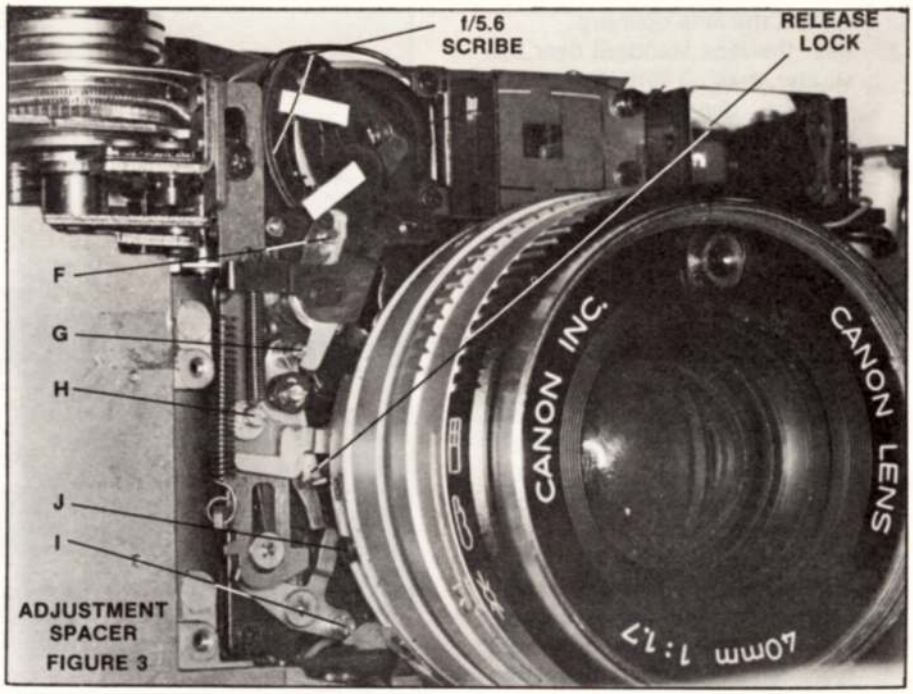

FIGURE 3

DISASSEMBLY HIGHLIGHTS:
Position of left-hand threads: shutter-retaining ring in G-III (normal thread in New Canonet QL 17/19)

Sequence:

1. top and bottom covers (battery cover and cover spring loose)
2. 2 sections, front leatherette
3. 2 front-cover plates, one on each side of lens (2 screws each)
4. unsolder red wire from battery-test board, Fig. 7
5. 2 screws holding shutter-release plate to connecting lever (adjustment spacer loose)
6. 4 screws, corners of lens standard
7. lift aside lens standard (viewfinder mask loose)
8. unsolder blue battery wire from terminal board

Sequence to remove shutter:

1. unsolder the five wires that come through the shutter port:
   —yellow from rangefinder resistor
   —white and purple from terminal board
   —red from variable resistor
   —black from hot-shoe contact
2. free wires from wire clamps
3. rear light shield (2 screws)
4. unscrew rear lens group
5. unscrew shutter-retaining ring (left-hand thread in G-III)

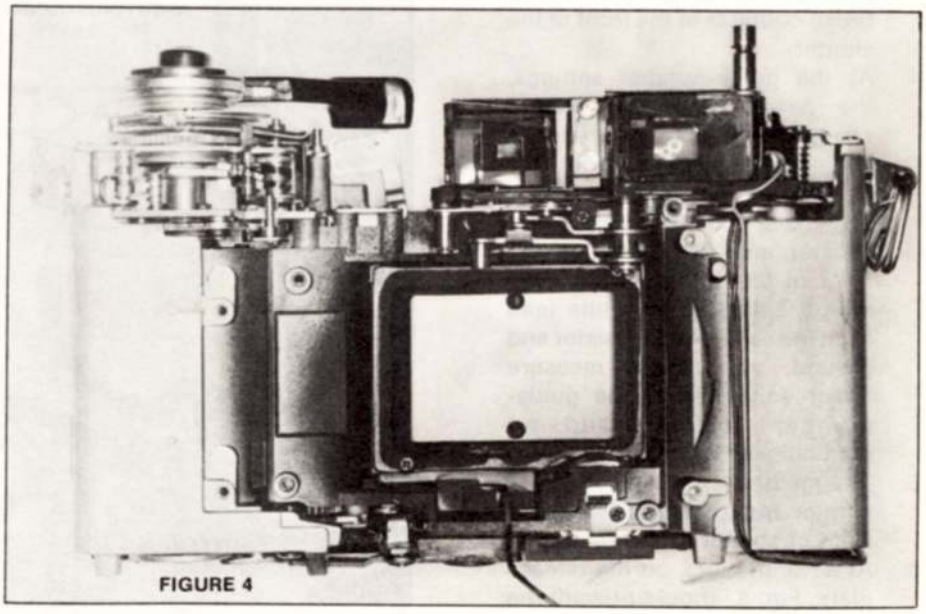
FIGURE 4

Sequence to reach switches at front of shutter:

1. front-retaining ring, identification ring, photocell mask
2. unscrew front lens group

Note: Unscrewing the complete lens cell requires a special spanner T0630-13-9246-1T. Without the special tool, you can first remove the front element. It's then possible to reach the spanner notches in the cell.

3. 2 screws holding CdS cell
4. filter ring (3 screws) — pass CdS cell through cutout in filter ring
5. speed-setting ring (tab on ring passes into slot in speed cam)
6. film-speed setting ring

Note: To reach the shutter mechanism, disassemble from the back of the shutter rather than from the front.

REASSEMBLY HIGHLIGHTS:
To mount the shutter to the lens standard:

1. Seat the intermediate ring and the charge ring on the back of the shutter, Fig. 6.
2. Push the end of the shutter-release lever as far as it will go

toward the lens opening.

3. Seat the lens standard over the shutter, making sure that the tab on the charge ring passes through the slot in the shutter-charge lever and that the aperture-connecting pin passes above the aperture-connecting lever.

METER TESTS:

1. Check the CdS cell between the yellow wire connected to the rangefinder resistor and ground.
2. Check the galvanometer between the red wire at the variable resistor and the blue wire at the terminal board. Approximate coil resistance: 1.6K.
3. At the auto setting, the needle deflection should change as you change the film-speed setting, shutter-speed setting, and light level. No deflection — check the CdS cell, the galvanometer, the battery connections, and the brush contacts at the front of the shutter.
4. At the guide-number settings, the needle deflection should change as you change the focus setting and the light level. No change at the different focus settings — check the rangefinder resistor and the switch at the front of the shutter. Check the switch between the white lead from the rangefinder resistor and ground; you should measure direct continuity at the guide-number settings and no continuity at auto.
5. The meter should turn off at the manual f/stop setting (switch at front of shutter).
6. At auto, the lock on the release plate, Fig. 3, should prevent the shutter from releasing if the needle is in one of the red areas at either end of the viewfinder scale (underexposure or overexposure). The shutter should always release at the manual f/stop settings.

BATTERY-CHECKER TESTS:

1. The battery-test lamp should turn on when you short B.C., Fig. 2, to ground.
2. The battery-test lamp should turn on with 1V connected directly between its leads.
3. If the battery-test lamp does not turn on with a good battery, check the voltage at the transistor base, Fig. 7. If you measure the proper base bias (0.8V), the transistor is the problem. If you do not measure the base bias, there's an open in the bias path (one of the resistors on the underside of the battery-test board or the thermistor).

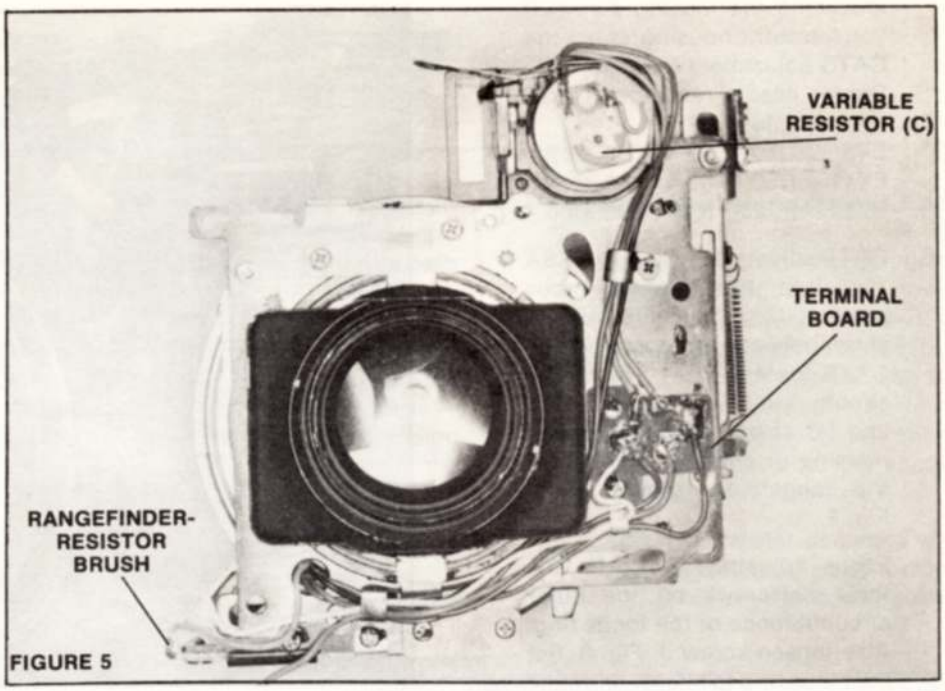

FIGURE 5

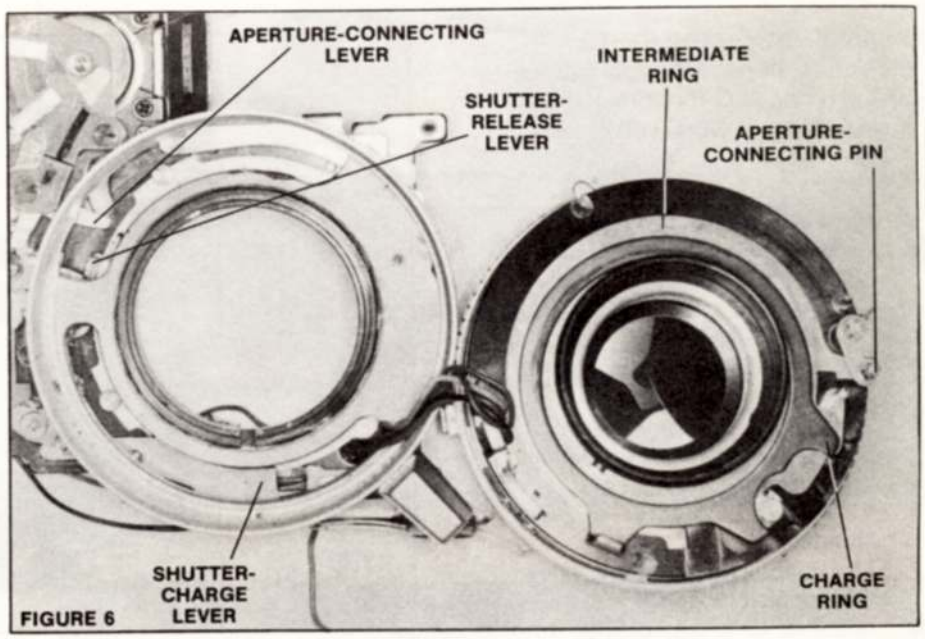

FIGURE 6

OTHER COMMENTS:

1. You can reach the rangefinder adjustments without removing the top cover. Slide off the accessory-shoe cover to reach the horizontal adjustment; unscrew the cover screw at the back of the top cover to reach the vertical adjustments.
2. The rangefinder resistor comes in two parts — the carbon resistor and a contact strip, Fig. 2. If you replace either part, apply conductive paint such as Silver Print between the contact strip and the resistance band as shown in Fig. 2.

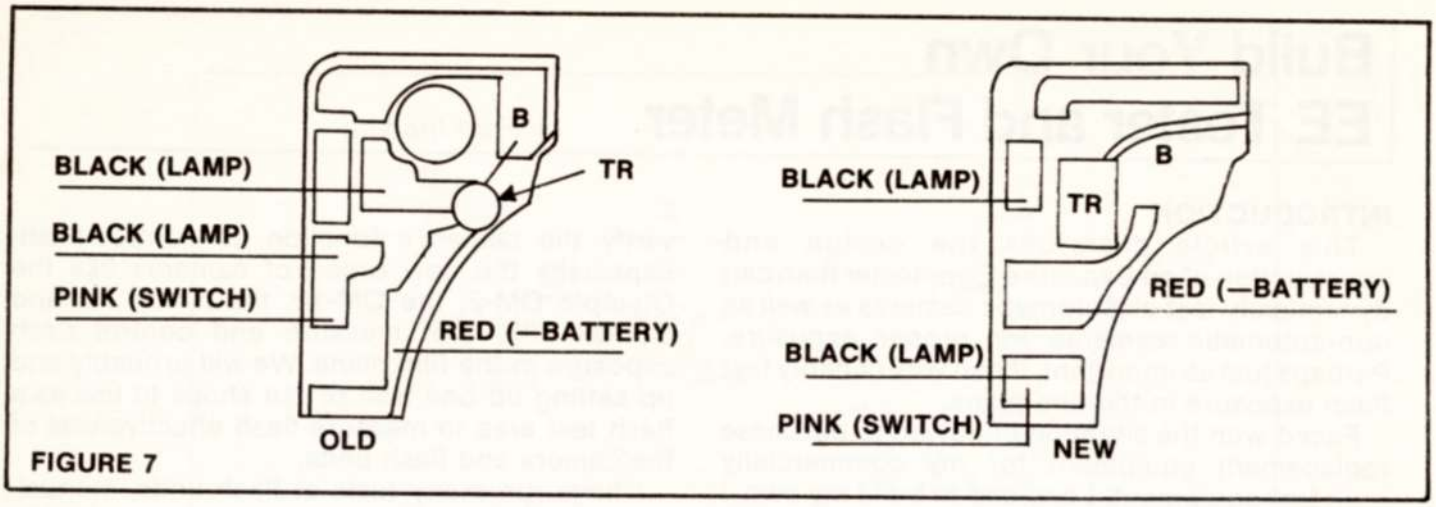

FIGURE 7

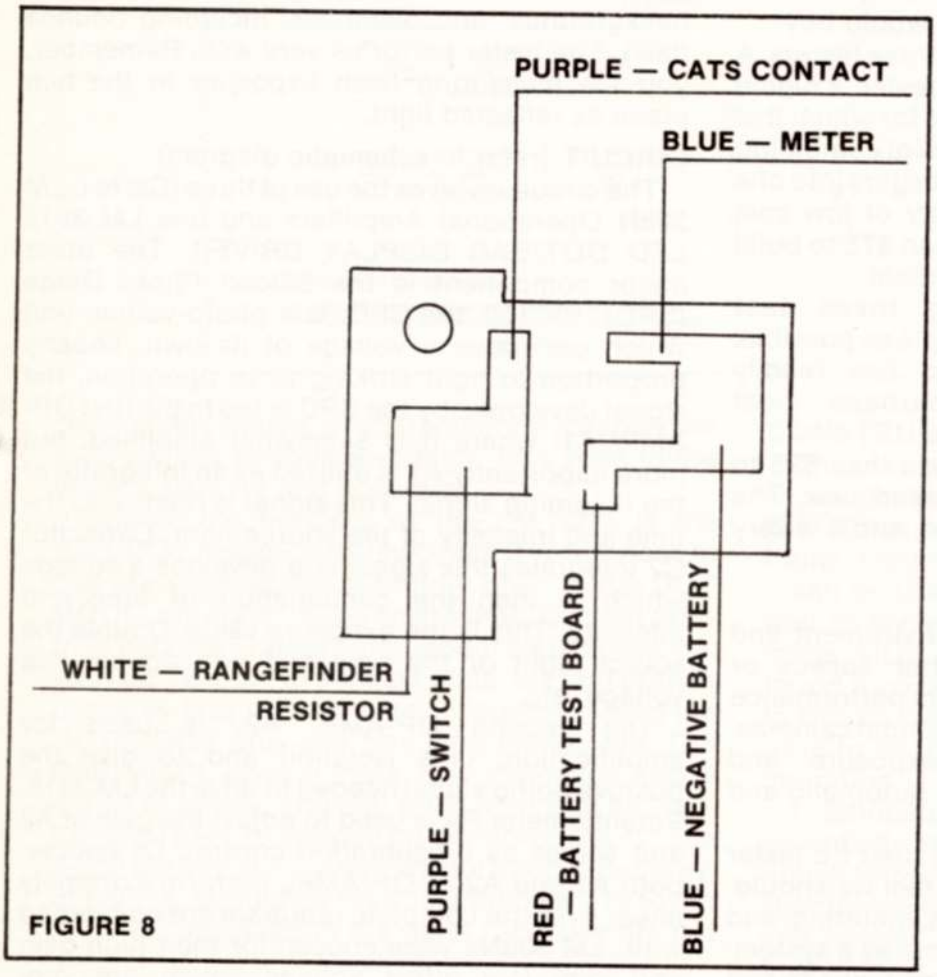

FIGURE 8